

AMENDMENTS TO THE CLAIMS

1-2 (Canceled)

3. (Currently amended) The adjustable joint mechanism of claim 11 wherein each knuckle has a planar face and its internally splined central hole is formed about an axis substantially perpendicular to the planar face, whereby the means for locking the pin in the two holes forces the planar faces of the two knuckles into abutment with one another.

4. (Currently amended) The adjustable joint mechanism of claim 3 wherein at least one of the internally splined central holes which is formed substantially perpendicular to the planar face of its knuckle is angled with respect to the said planar face so that the action of locking the pin in the holes stresses the pin.

5. (Currently amended) The adjustable joint mechanism of claim 11 wherein the internally splined central holes in the two knuckles are formed with different numbers of splines, the two numbers not having a common denominator, and the cylindrical pin has a head end, a first cylindrical section of larger diameter joined to the head end and formed with said axially extending splines, and a second cylindrical section of smaller diameter joined to the end of the first cylindrical section also formed with said axially extending splines, the two cylindrical sections being formed with different counts of splines of different numbers, corresponding to the numbers counts of the splines in the first and second splined central holes of the knuckles,

whereby the rotational position of the knuckles may be adjusted to a resolution which represents a multiple of the two spline counts.

6. (Currently amended) The adjustable joint mechanism of claim 5 wherein the angular relationship between the central hole in each of the knuckles and the center line of the splined connection between the knuckle and its associated member deviates from the perpendicular, whereby upon locking the pin in the two members both the splined connection between the knuckles and their associated members and the pin connection between the two knuckles are stressed.

7. (Currently amended) An adjustable position support stand for an article, comprising:

a pair of elongated members each having a central axis, comprising a first member and a second member;

a base for securing a first end of the first of said ~~links~~ members to a supporting structure;

means for fixing said article to a first end of the second of said ~~links~~ members; and

an adjustable joint for fixing the second ends of each of the pair of ~~links~~ members to one another in a chosen positional relationship, said joint comprising:

a pair of knuckles, each attached to one of said ~~links~~ members, each knuckle having an internally splined central hole;

a cylindrical pin formed with axially extending splines adapted to be inserted through the internally splined holes of the two knuckles;

means for locking the pin in the holes to thereby fix the positional relationship of the two knuckles and their attached ~~links~~ members; and

a pair of ~~connectors~~ structures each joining one of the knuckles to one of the elongated members so that the internally splined central hole of the knuckle extends substantially ~~normally~~ normal to the central axis of its connected elongated member, each connector such structure comprising a first cylindrical part having axially extending splines and a second part having a hole with internal splines, the first part being adapted to be inserted into the hole in the second part to control the rotational position of the first and second parts, with the central axis of the cylindrical part and the hole being coaxial with the central axis of the connected elongated member and substantially normal to said cylindrical pin.

8. (Previously presented) The adjustable position support stand of claim 7 wherein each knuckle has a planar face and the internally splined central hole of each knuckle is formed about an axis substantially perpendicular to the planar face, whereby said means for locking the pin in the holes to thereby fix the positional relationship of the two knuckles and their attached links forces said two planar faces of the two knuckles into engagement with one another.

9. (Currently amended) The adjustable joint position support stand of claim 8 wherein at least one of the internally splined central holes is formed at an angle that deviates from the perpendicular to the planar face, whereby said means for locking the pin in the holes to

thereby fix the positional relationship of the two knuckles and their attached links members, bringing the planar faces into abutment with one another, prestresses the cylindrical pin.

10. (Currently amended) The adjustable joint position support stand of claim 7 wherein the central holes formed in the two knuckles have different diameters and the splines formed in the central holes have a different spline count, without a common denominator to the two spline counts, and the cylindrical pin comprises a head, a first large diameter section extending from the head, and a second, smaller diameter section extending from the end of the first cylindrical section, the pin being adapted to pass through the central hole in one knuckle and then through the central hole in the other knuckle, and the two cylindrical sections of the pin having spline counts which correspond with the spline counts of the central holes in which the two cylindrical sections of the pin fit.

11. (Currently amended) A positionally adjustable mechanism, comprising:
a pair of elongated members each having a central axis;
a base member fixed to a first end of one of the elongated members;
an article to be supported fixed to a first end of the other elongated member;
a pair of knuckles, each knuckle having an internally splined central hole;
a cylindrical pin formed with axially extending splines adapted to be inserted through said internally splined holes of the two knuckles;
a pair of connectors structures each joining one of the knuckles to a second end of one of the elongated members so that the internally splined central hole of the knuckle extends

substantially normally normal to the central axis of its connected elongated member, each connector such structure comprising a first cylindrical part having axially extending splines and a second part having a hole with internal splines, the first part being adjusted to be inserted into the hole in the second part to control thereby allowing control of the rotational position of the first and second parts relative to one another, with the central axis of the cylindrical part and the hole being coaxial with the central axis of the connected elongated member and substantially normal to said cylindrical pin;

whereby, the orientation of the pair of elongated members relative to one another may be adjusted and fixed.